

Specs	Min	Max	Scale of Importance Scale of 1-5, 5 is the most important	Selection
The Walt				
Forward Speed	1.5 (MPH)	2.5 (MPH)	5	3.5 (MPH)
Side to side speed	0.5 (MPH)	1.25 (MPH)	5	3.5 (MPH)
Weight	100 (lbs)	300 (lbs)	5	300 (lbs)
Steering with upper torso	No	Yes	5	Yes
On board energy storage at 50% duty cycle	8 (min)	20 (min)	5	20.2 (min)
Back up pack install time	30 (min)	2 (min)	5	?
Operator quick release	10 (sec)	1 (sec)	5	1 (sec)
E-Stop circuit within reach	No	Yes	5	Yes
Staging Cart	No	Yes	2	No
Collapsable	Solid Weldment	Hinged	1	Solid Weldment
Motor				
Voltage	12 (V)	24 (V)	5	24 (V)
Amperage	10 (A)	80 (A)	5	32.83 (A)
Horsepower	0.7 (Hp)	2.1 (Hp)	5	2.1 (Hp)
Torque	227.16 (in-lbs)	1021 (in-lbs)	5	1167 (in-lbs)
Weight	3 (lbs)	10 (lbs)	2	5.9 (lbs)
Speed	2 (MPH)	3.5 (MPH)	5	3.5 (MPH)

Frame

Rigidity	Semi-Rigid	Rigid	5	Rigid
Weight	100 (lbs)	300 (lbs)	5	300 (lbs)
Size	Narrow/Short	Wide/Tall	3	Wide/Tall
Material	Steel	Aluminum	5	Aluminum
Collapsible	Solid Weldment	Hinged	1	Solid Weldment
Modular	Partial	Complete	4	Complete
CG	6 (inches from ground)	30 (inches from ground)	5	20 (inches from ground)

Omni-Wheels

Diameter	10 (in)	15 (in)	2	12 (in)
Roller Material	Soft	Hard	5	Medium
Cost	500 (\$)	800 (\$)	5	500 (\$)
Functionality	Smooth	Rough	4	Smooth
Machinability	Simple	Complicated	4	Simple
Weight	8 (lbs)	20 (lbs)	3	16.31 (lbs)
Strength	Low	High	5	High
Durability	Short	Long	5	Long

Batteries

Size	Small	Large	5	Small
Weight	10 (lbs)	30 (lbs)	5	10 (lbs)
Amp-Hours	5 (AH)	22 (AH)	3	7 (AH)
Functional Time	8 (min)	20 (min)	5	20.2 (min)
Cost	20 (\$)	90 (\$)	3	28.99 (\$)

Motor Controller

Voltage	12 (V)	24 (V)	5	24 (V)
Continuous Amp Capacity	60 (A)	80 (A)	5	80 (A)
Reversible	No	Yes	5	Yes
Input	RC	PWM	3	PWM

Joystick

Voltage	5 (V)	12 (V)	5	10 (V)
X axis	No	Yes	5	Yes
Y Axis	No	Yes	3	Yes
Potentiometer	No	Yes	4	Yes

Interface

Auto-return to Center	No	Yes	3	Yes
Quick Release	No	Yes	5	Yes
2 Joysticks	No	Yes	3	Yes
E-Stop Circuit	No	Yes	5	Yes
Steering with a harness	No	Yes	5	Yes

E-Stop Circuit

E-Stop Button polarity	NO or NC	Both NO and NC	3	Both NO and NC
On off switch	No	Yes	3	Yes
Solenoids	No	Yes	5	Yes
Fuses	No	Yes	5	Yes

Solenoids

Voltage	12 (V)	24 (V)	5	24 (V)
Continous Amp Capacity	80 (A)	100 (A)	5	100 (A)
Polarity	NC	NO	3	NO
Number of poles	SPDT	SPDT	5	SPST
Grounded	Self grounded	Isolated	5	Isolated